

Remarks

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the claims and the following remarks.

The Office Action is non-final. Claims 1-10 are currently pending. Claims 1-5 and 7-10 have been amended to further clarify and define the invention. Support for claim 1 can be found on page 12, lines 5-6, page 15, line 25 to page 16, line 7 of the present specification. Support for claim 2 can be found page 15, lines 3-8 of the present specification. Claim 5 is based on support within the present specification at page 12, lines 5-6. Amended claim 7 is based on page 49, lines 1-3, and page 52, lines 3-9 of the present specification. Support for claim 8 can be found on page 50, lines 12-17 of the present specification.

Applicants additionally note that the phrase “excluding preventing photodegradation with packaging” in claim 5 is not described directly in the originally filed specification. However, the presently claimed invention relates to light-exposing food. Applicants submit that it is clear that for reasons to emphasize the freshness and safety of food and to help consumers have a sense of safety (see page 1, line 20 - page 2, line 19, and page 4, line 16 - page 5, line 8 of the originally filed specification) the light exposing food cannot be cut off from light.

For example, it is impossible to make judgments (*e.g.*, whether the cake is fresh or not) when the cake is hidden within the packaging. Applicants submit that the presently claimed invention does not intend to shade (*i.e.*, protect) the oil-in-water type emulsion with packaging.

Applicants submit that one skilled in the art, upon reading the specification as originally filed, would understand and conclude that Applicants had implicitly or inherently contemplated the added limitation within claim 5 and that it was in their possession at the time of filing the application. Therefore, the above phrase is substantially supported by the originally filed specification.

Entry of the present Amendment is respectfully requested.

Rejection Under 35 U.S.C §103(a)

Claims 1, 3 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rek, U.S. Patent No. 4,350,715 (hereinafter "Rek") as further evidenced by Swern, Bailey's Industrial Oil and Fat Products, Vol. 1, John Wiley and Sons, New York, pp. 315 and 318 (hereinafter "Swern") and further evidenced by Potter, Food Science, Second Edition, The Avi Publishing Company, Westport, CT, p. 142 (1973) (hereinafter "Potter").

Applicants respectfully traverse the rejection.

The Examiner's Position:

The Examiner asserts that the present application is obvious in light of the above cited references, as indicated on pages 2-3 of the outstanding Office Action.

Based on the following, Applicants contend that the Examiner's position is not supportable, thereby making the presently claimed invention unobvious over the cited references.

Applicants' Position

The presently claimed invention is directed to processes for producing an oil-in-water type emulsion for light-exposing food.

Unexpected Effects

The presently claimed invention has an unexpected and excellent effect in that photodegradation is prevented by adjusting the composition of non-milk fat (see Table 2, page 24, of the present specification).

As indicated on page 18 of the specification, after a photo-irradiation test was conducted (fluorescent lamp, illuminance: 4000 Lx), evaluations to the test samples were conducted after storage at a temperature of 5°C for 12, 24 and 72 hours. Taste evaluation was based on 1-5 point scale, which a score of 5 is the designated as the highest score.

As Table 2 indicates, examples 1-3 maintain higher level scores than the comparative examples 1-2 during the evaluation period.

Applicants submit that based upon the unexpected results, even if the fat-based material of Rek are known, one of ordinary skill in the art would not have conceived of thinking that the oil-in-water type emulsion of the present claimed invention has photodegradation resistance.

Accordingly, in light of the amended claims and the above remarks, it follows that the presently claimed invention is unobvious to one of ordinary skill in the art. The secondary references, Swern, and Potter, do not remedy the deficiencies of the Rek reference.

Applicants respectfully request reconsideration and withdrawal of the present rejection.

Rejection Under 35 U.S.C §102(b), or in the alternative, 35 U.S.C §103(a)

Claims 1, 3 and 4 stand rejected under 35 U.S.C. § 102(b) as anticipated, or in the alternative, rejected under 35 U.S.C. § 103(a) as unpatentable over Rek as further evidenced by Swern and Potter.

Applicants respectfully traverse the rejection.

Applicants respectfully request the Examiner reconsider the comments regarding the Rek reference made in the previous response dated December 18, 2009 (herein incorporated by reference) in view of the presently amended claims.

Applicants incorporate the previous rejection comments concerning the Rek reference and the presently claimed invention's unexpected effects and respectfully submit that the presently claimed invention is neither anticipated nor rendered obvious over Rek in view of the cited secondary references.

Applicants respectfully request reconsideration and withdrawal of the rejection.

Rejection Under 35 U.S.C §103(a)

The following rejections under 35 U.S.C. § 103(a) are presented by the Examiner.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rek as further evidenced by Swern and Potter as applied to claims 1, 3 and 4, and as further evidenced by Potter.

Claims 2 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rek as further evidenced Swern and Potter as applied to claims 1, 3 and 4, alone or if necessary, in view of Arcadipane, U.S. Patent No. 5,393,551 (hereinafter "Arcadipane").

Claims 7 and 9-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bundus, U.S. Patent No. 3,488,198 (hereinafter "Bundus") as further evidenced by Potter and also Swern.

Applicants respectfully traverse the above rejections.

Applicants incorporate the above comments concerning the Rek reference and the presently claimed invention's unexpected effects and respectfully submit that the presently claimed invention is unobvious over Rek or Bundus in view of the cited secondary references.

Additionally, Applicants provide the following comments.

Applicants submit that based upon the unexpected results, even if the fat-based material of Rek and the filled milk of Bundus are known, one of ordinary skill in the art would not have conceived of thinking that the oil-in-water type emulsion of the present claimed invention has photodegradation resistance.

With regard to claim 5, claim 5 was amended to exclude prevention of photodegradation with packaging since the presently claimed invention relates to light-exposing food.

Applicants note that it is important that the presently claimed invention is designed for suppressing photodegradation of light-exposed foods (*e.g.*, dessert and cakes) which cannot be

covered from light for reasons such as to emphasize the freshness and safety of food, as well as to help consumers have a sense of safety with regards to the product (see page 1, line 20-page 2, line 19, and page 4, line 16- page 5, line 8 of the present specification).

For example, it is impossible to make judgments (such as the freshness and safety of food) when the cake is hidden within the packaging. Applicants submit that the presently claimed invention does not intend to shade (*i.e.*, protect) the oil-in-water type emulsion with packaging. Applicants submit that it is clear that for reasons to emphasize the freshness and safety of food and to help consumers have a sense of safety, the light exposing food cannot be cut off from light.

Therefore, it is evident to one of ordinary skill in the art that Potter and the other cited references would not provide any teaching or suggestion concerning the objectives of the presently claimed invention and how to achieve them.

Accordingly, in light of the amended claims and the above remarks, it follows that the presently claimed invention is unobvious to one of ordinary skill in the art.

Thus, Applicants submit that the cited secondary references do not remedy the deficiencies of the Rek or Bundus references, discussed above.

Applicants respectfully request reconsideration and withdrawal of the above rejections.

Rejection Under 35 U.S.C §102(b), or in the alternative, 35 U.S.C §103(a)

Claim 7 stands rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, rejected under 35 U.S.C. § 103(a) as obvious over Bundus as further evidenced by Potter and Swern.

Applicants respectfully traverse the rejection.

The presently claimed invention discloses a process for producing an oil-in-water type emulsion for light-exposing food which comprises mixing ingredients comprising fat, nonfat

milk solids, emulsifier and water, pre-emulsifying the mixture, pasteurizing or sterilizing the mixture, and homogenizing the mixture.

Additionally, the fat consists of non-milk fat and the emulsion is a nonfat milk solid-containing oil-in-water type emulsion comprising 1 to 12% by weight of fat and 3 to 26% by weight of nonfat milk solids; the ratio of the nonfat milk solids to the fat ingredient in the oil-in-water type emulsion is not less than 1 relative to 1 of the fat ingredient. The non-milk fat has such a constituent fatty acid composition that the total amount of lauric acid and palmitic acid is not less than 40%. The total amount of oleic acid, linoleic acid and linolenic acid is not more than 50% and the total amount of linoleic acid and linolenic acid is not more than 5%. Finally, the emulsifier is free from an unsaturated fatty acid.

Applicants incorporate the above comments concerning the Bundus reference and the presently claimed invention's unexpected effects and respectfully submit that the presently claimed invention is neither anticipated nor obvious over Bundus in view of Potter and Swern.

Applicants further submit that based upon the unexpected results, even if the filled milk of Bundus are known, one of ordinary skill in the art would not have conceived of thinking that the oil-in-water type emulsion of the present claimed invention has photodegradation resistance.

Accordingly, in light of amended claim 7 and the above remarks, it follows that the presently claimed invention is neither anticipated nor rendered obvious over the cited references.

Applicants respectfully request reconsideration and withdrawal of the rejection.

Rejection Under 35 U.S.C §103(a)

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bundus as further evidenced by Swern and Potter as applied to claim 7, 9 and 10, and in further view of Arcadipane.

Applicants respectfully traverse the rejection.

Applicants incorporate the above comments concerning the Bundus reference and the presently claimed invention's unexpected effects and respectfully submit that the presently claimed invention is unobvious over Bundus in view of the cited secondary references.

For the foregoing reasons, Applicants contend that the presently claim invention is unobvious to one of ordinary skill in the art and that the cited references do not teach or suggest the presently claimed invention.

Applicants respectfully request reconsideration and withdrawal of the above rejection.

Conclusion


Applicants respectfully submit that all of the rejections raised by the Examiner have been overcome, and that the present application now stands in condition for allowance.

Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact Paul D. Pyla at the telephone number below, in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 23-0975 for any additional fees required under 37 C.F.R. §§1.16 or 1.17.

Respectfully submitted,

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